



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

FEBRUARY 4.

Mr. WILLIAM W. JEFFERIS in the chair.

Twenty persons present.

A paper entitled "The Genesis and Horizons of the Serpentes of South Eastern Pennsylvania," by Theodore D. Rand, was presented for publication.

FEBRUARY 11.

Dr. CHARLES SCHAEFFER in the chair.

Seventeen persons present.

Papers under the following titles were presented for publication :—

"Note on a Southern Pupa." By H. A. Pilsbry.

"A Review of the Cernaycian Mammalia." By Henry Fairchild Osborn.

"On *Arenicola cristata* and its Allies." By J. E. Ives.

FEBRUARY 18.

Mr. HAROLD WINGATE in the chair.

Nineteen persons present.

A Remarkable Variation of Stemonitis Bauerlinii, Mass.—DR. GEORGE A. REX presented a series of specimens illustrating a strongly marked variation of *Stemonitis Bauerlinii* Mass., and the successive phases of its reversion to the typical form.

Four years previously, he had found on the surface of a decaying log in Fairmount Park, Phila., a patch of sporangia of a *Stemonitis* which, by a superficial inspection appeared to be *Stemonitis Morgani* Pk. Subsequent examination with the microscope, however, showed certain peculiarities of structure, not found in any known species of *Stemonitis*. These variant characters were so marked that they would have justified, had they proved constant, the creation of a new species and also, perhaps, a new generic type.

All of the sporangia of the entire growth which covered a superficial area of five or six square inches, were alike in structure and perfectly mature, so that their unusual form was not due to irregular individual development or immaturity. The sporangia differed in form from typical *Stemonitis*, in being irregularly three-sided, or

triangular in section in the upper two-thirds of their length, instead of being cylindrical as usual.

This irregular shape was due to the anomalous position of the columella which was lateral and not central, running from the base of the sporangium nearly to the end, in a spiral of about two and one-half turns, appressed and closely attached to the inner face of the sporangium wall.

The internal capillitium, usually composed of radial threads running from the central columella to the peripheral network was wanting; but in place of it, a few delicate threads bound the columella, at short intervals to the periphery, and then ramified for a little distance upon the latter.

The sporangium wall or periphery was most remarkable, being, in effect, a rigid sheath of plasmodic matter, perforated by circular and oval openings, instead of the peripheral network of threads parallel to the axis of the sporangium, which is characteristic of typical *Stemonitis*. At intervals, on the surface of this plasmodic sheath, knots were developed from which short threads branched in all directions, sometimes connecting with those binding the columella but generally blending with the substance of the sheath.

As the season was advanced no other specimens were found in that year, but in the following year, three crops of *Stemonitis* were successively developed at intervals of about one month on the same area of log surface which had been carefully marked and noted. By a warrantable inference these growths were developed from the spores, or part of the same plasmodium as the specimens of the previous year. Each crop bore the main variant characters of the original specimens, but approached successively nearer the true *Stemonitis* type.

The last found growth differed but slightly from *Stemonitis Bauerlinii* Mass., yet, as it presented all its diagnostic characters, the whole series could logically be referred to that species.

These and all similar variations in the sporangia of the myxomycetes, are caused by the irregular or unusual differentiation of the formative plasmodium during development. In the present case, the sporangium wall gained an increased amount of plasmodic matter at the expense of the central capillitium.

Whether this change was abrupt, or the result of several generations leading to it, could not be known, but the observations which were made, though lacking some of the essentials of scientific exactness, seemed to show a very interesting example of the reversion of an extremely variant form to its original type.

The speaker believed that this abnormal form would again be developed and found, and he desired, therefore, to place it on record as *Stemonitis Bauerlinii* Mass. f. *fenestrata*. He acknowledged his indebtedness to the courtesy of Mr. George Massee, the author of the species, for an authentic specimen of *Stemonitis Bauerlinii*.